

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1 1. (Previously presented) A method of joining composite parts comprising:
 - 2 disposing a plurality of extrinsic reinforcing elements each extending through the
 - 3 thickness of two composite adherends to be joined, at least a number of said reinforcing
 - 4 elements extending from the joint surface of each said adherend;
 - 5 assembling said adherends so that the joint surface of one said adherend faces the
 - 6 joint surface of the other said adherend defining a joint region therebetween, said extending
 - 7 reinforcing elements interstitially disposed in said joint region; and
 - 8 disposing an adherent within said joint region about said interstitially disposed
 - 9 reinforcing elements and said joint surfaces.
- 1 2. (Original) The method of claim 1 in which said adherends are carbon-carbon composite
- 2 structures.
- 1 3. (Original) The method of claim 1 in which said reinforcing elements are fibers.
- 1 4. (Original) The method of claim 1 in which said adherent is a metallic braze material.
- 1 5. (Cancelled)

1 6. (Previously presented) A method of joining composite parts comprising:

2 disposing a plurality of extrinsic reinforcing elements each extending through the
3 thickness of two composite adherends, said reinforcing elements extending from the joint
4 surface of each said adherend;

5 assembling said adherends so that the joint surface of one said adherend faces the
6 joint surface of the other adherend;

7 disposing an adherent interlayer between said opposing joint surfaces;

8 urging said extending reinforcing elements of each said adherend through said
9 adherent interlayer and interstitially locking said reinforcing elements therein.

1 7. (Original) The method of claim 6 in which said adherent interlayer is a prepreg material,
2 the method further including the step of curing said material.

1 8. (Cancelled)

1 9. (Previously presented) A method of joining composite parts comprising:

2 disposing a plurality of extrinsic reinforcing elements each extending through the
3 thickness of a first composite adherend to be joined, at least a number of said reinforcing
4 elements extending from the joint surface of said first adherend;

5 assembling said first adherend with a second adherend such that the joint surface of
6 the first said adherend faces the joint surface of the second said adherend at the joint region
7 therebetween, said extending elements of said first adherend disposed against the joint
8 surface of said second adherend; and

9 disposing an adherent within said joint region.

1 10. (Previously presented) A method of joining composite parts comprising:

2 disposing a plurality of extrinsic reinforcing elements each extending through the
3 thickness of a first component adherend at the joint surface of said first adherend, at least a
4 number of said reinforcing elements extending from the joint surface of said first adherend;

5 assembling said first adherend with a second adherend such that the joint surface of
6 the first said adherend faces the joint surface of the second said adherend;

7 disposing an adherent interlayer between said opposing joint surfaces; and

8 urging said extending reinforcing elements of said first adherend through said
9 adherent interlayer and against the joint surface of the second said adherend and locking said
10 reinforcing elements therein.

1 11. (Original) The method of claim 10 in which said adherent interlayer is a prepreg
2 material, the method further including the step of curing said prepreg.

1 12. (Previously presented) A method of joining composite parts comprising:

2 disposing a plurality of extrinsic reinforcing elements each extending through the
3 thickness of two composite adherends at the joint surface of each said adherend to be joined;

4 assembling said adherends so that the joint surfaces of one said adherend faces the
5 joint surface of the opposing said adherend;

6 disposing an adherent within the joint region defined by said facing joint surfaces and
7 urging said adherent to flow at least partially along the length of said reinforcing elements

8 within said adherends.

1 13. (Original) A method of joining a composite part with a non-composite part comprising:

2 inserting, through the thickness of said composite part, a plurality of reinforcing

3 elements extending from the joint surface thereof;

4 assembling said composite part such that said reinforcing elements are proximate the

5 joint surface of said non-composite part; and

6 brazing said joint surfaces and said reinforcing elements to form a joint.

1 14. (Previously presented) A method of joining composite parts comprising:

2 inserting, through the thickness of each said composite part, a plurality of extrinsic

3 reinforcing elements extending from the joint surface thereof;

4 assembling said composite parts such that said reinforcing elements are interstitially

5 disposed at the joint region therebetween;

6 selecting a braze material compatible with said composite parts and said reinforcing

7 elements;

8 applying said braze material to said joint region; and

9 urging said braze material to flow about said interstitially disposed reinforcing

10 elements; and

11 allowing said braze material to harden.

1 15. (Previously presented) A method of joining composite parts comprising:

2 inserting, through the thickness of one said composite part, a plurality of extrinsic

reinforcing elements extending from the joint surface thereof;
assembling one said composite part with a second composite part such that said reinforcing elements are disposed about the joint surface of said second composite part;
selecting a braze material compatible with said composite parts, and said reinforcing elements;
applying said braze material to the joint region between said composite parts;
urging said braze material to flow about said reinforcing elements; and allowing said braze material to harden.

16. (Previously presented) A method of joining composite parts comprising:

inserting, through the thickness of each said composite part, a plurality of extrinsic reinforcing elements extending from the joint surface thereof;
selecting an adherent interlayer material for joining said parts;
assembling said composite parts such that said joint surfaces face each other with said adherent interlayer therebetween;
driving said reinforcing elements into said adherent interlayer and curing said interlayer locking said reinforcing elements therein.

17. (Original) A method of claim 16 in which said adherent interlayer is a prepreg material and the step of driving said reinforcing elements and curing includes subjecting the assembly to elevated pressure and temperature.

1 18. (Previously presented) A method of joining composite parts comprising:

2 inserting, through the thickness of one composite part, a plurality of extrinsic
3 reinforcing elements extending from the joint surface thereof;

4 selecting an adherent interlayer material for joining said parts;

5 assembling said composite parts such that said joint surfaces face each other with said
6 adherent interlayer therebetween;

7 driving said reinforcing elements into said adherent interlayer and curing said adherent
8 interlayer locking said reinforcing elements therein.

1 19. (Original) A method of joining a composite part with a non-composite part comprising:

2 inserting, through the thickness of said composite part, a plurality of reinforcing
3 elements at least at the joint region thereof;

4 assembling said composite part such that said reinforcing elements are disposed
5 proximate the joint surface of said non-composite part; and

6 brazing said joint surfaces and urging braze material to flow along the lengths of said
7 reinforcing elements into said composite part.

1 20. (Previously presented) A method of joining composite parts comprising:

2 disposing a plurality of extrinsic reinforcing elements through the thickness of the
3 composite adherends to be joined, at least a number of said reinforcing elements exposed at the
4 joint surface of each said adherend;

5 assembling said adherends so that the joint surface of one said adherend faces the joint
6 surface of the other said adherend defining a joint region therebetween; and

7 disposing an adherent within said joint region and about said exposed reinforcing
8 elements and said joint surface.

1 21. (Cancelled)

1 22. (Previously presented) A method of joining a composite part with a non-composite part,
2 comprising:

3 inserting, through the thickness of said composite part, a plurality of extrinsic
4 reinforcing elements at least at the joint region thereof, said reinforcing elements exposed at
5 the joint surface of said composite part;

6 assembling said composite part such that said exposed reinforcing elements are
7 disposed proximate the joint surface of said non-composite part; and

8 disposing an adherent about said exposed reinforcing elements and said joint surfaces.

1 23. (Cancelled)

1 24. (Previously presented) A method of joining composite parts comprising:

2 inserting a plurality of extrinsic reinforcing elements each extending through the
3 thickness of two composite adherends to be joined, each composite adherend containing fibers
4 in a resin matrix, said reinforcing elements inserted transverse to the direction of the fibers in
5 the resin matrix, said reinforcing elements left extending from the joint surfaces of each
6 adherend;

7 assembling said adherends one on top of the other so that the joint surface of one said

8 adherend faces the joint surface of the other said adherend defining a joint region
9 therebetween, said extending reinforcing elements interstitially disposed in said joint region;
10 and
11 disposing an adherent within said joint region about interstitially disposed reinforcing
12 elements and said joint surfaces.

1 25. (New) A method of joining composite parts comprising:

2 disposing a plurality of extrinsic reinforcing elements in a first composite adherent;
3 disposing a second plurality of extrinsic reinforcing elements in a second composite
4 adherent, at least a number of said reinforcing elements extending from a joint surface of
5 each said adherend;

6 assembling said adherends so that the joint surface of one said adherend faces the
7 joint surface of the other said adherend defining a joint region therebetween, said extending
8 reinforcing elements interstitially disposed in said joint region; and

9 disposing an adherent within said joint region about said interstitially disposed
10 reinforcing elements and said joint surfaces.